

ABSTRACT

5 A method and device for testing multi-channel transceivers in an integrated circuit is provided. More specifically, the present invention relates to a method and device for implementing a built-in self-test for multi-channel transceivers. An exemplary embodiment of the present invention includes a test pattern generator, a multiplexer, a demultiplexer, and a test result evaluator. The test pattern generator generates a test pattern which is fed into each of the input channels of the multiplexer. The multiplexer multiplexes the data from all
10 its input channels and then relays the data to the demultiplexer. The test result evaluator then individually checks the data at each of the output channels of the demultiplexer to determine whether the data received at each output channel is the same as the test pattern. In order to facilitate the checking process, signature analysis is utilized.

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